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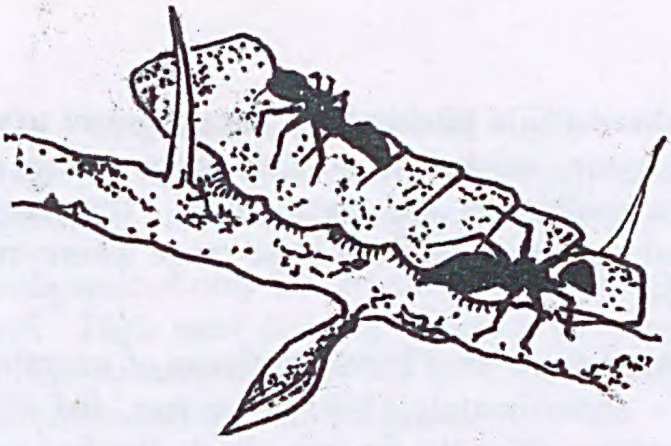

Eltham Copper Butterfly Caterpillar and Ants

Stop Press !

Five Swift Parrots this week at the Castlemaine Golf Course. One was in Margaret's block and the other four flew overhead. Debbie Worland

Kidnapping Witnessed at Yapeen!

Recently I witnessed , in a neighbour's paddock, a 'kidnapping' by a small family of White-winged Choughs, as described in David Attenborough's "Life of Birds". I was alerted by loud alarm calls from two families of Choughs, one group of thirteen to fourteen and the other of nine. The smaller family were displaying their wings while on the ground, the larger family were issuing alarm calls. Two of the smaller family attracted an immature bird to them and then the whole group surrounded it in an almost full circle and, with wings still fully displayed, shepherded it up the paddock until the large group flew off in defeat.

Margaret Badminton

61 Hunter Street – Summer/Autumn 2004

The Ravens are still around, but the continuing presence of a family of Magpies has meant that they are not in total control of the area. As spring became a long dry summer, and after the Red Wattlebirds had finished breeding and become less aggressive, the smaller birds appeared more regularly at the bird baths. There have been the usual flocks of Thornbills grazing on the dry grass, and juvenile Wrens, New Holland Honeyeaters, Grey Fantails, Yellow-faced Honeyeaters, Eastern Spinebills and Silvereyes – all indicating a good breeding season.

On one occasion I discovered a tiny New Holland Honeyeater submerged to the neck in the bath – head and long curved bill above water, and seemingly unable to extricate himself. I lifted him out and on to a nearby twig to dry out, where he sat for sometime looking dazed in the hot sunshine. Because of the exposed position I eventually cupped him in my hands briefly where he soon recovered enough to fly off to the top of the Cotoneaster nearby.

The Striated Pardalotes made up for time lost during early spring by producing two families over the summer. The two nest boxes have been in place for eight years – one had never been occupied before. Early one morning, as I watered plants in the vicinity, I was astonished to see that the young had all emerged from both boxes, and

were sheltering in a prickly Hawthorn adjacent to their homes, hopping around and intent on getting as close as possible to the strange creature below. There seemed to be two pairs of adults, and seven young. They are very curious and reckless at this stage, and examined me from close range wherever possible. Some are still around the garden.

During April there have been two flocks of migratory Tasmanian Silvereyes passing through – approximately 15-20 in number, and all crowding noisily into the baths before dashing off to the fig tree. Sadly the figs were hard and green, and the birds continued on their long journey north.

The Box Mistletoe on our eucalypt has bloomed profusely over a long period, and attracted many nectar feeding birds. No Mistletoe Birds were around here this summer. A pair of juvenile Grey Currawongs appeared at the baths occasionally, as did a solitary Willy Wagtail and several Crimson Rosellas. It is reassuring to hear Bronzewing Pidgeons and Southern Boobooks calling from the Kalimna bush at Parker Street east behind us, and sometimes from the "Buda" garden opposite.

Shirley Parnaby

Mistletoe Host Plants

What are the host plants for the mistletoes of the Castlemaine District? The list below is a start. Can you add to the list?

Box Mistletoe (*Amyema miquelii*)

Drooping Sheoke	Grey Box	Long-leaf Box
Red Box	Red Ironbark	Red Stringybark
Yellow Box	Yellow Gum	

Wire-leaf Mistletoe (*Amyema preissii*)

Blackwood	Cootamundra Wattle	Early Black wattle
Golden Wattle	Silver Wattle	Tree Lucerne
Wallowa	Whirrakee Wattle	White Sallow Wattle

Drooping Mistletoe (*Amyema pendula*)

Blue Gum	Cootamundra Wattle	Drooping Sheoke
Lightwood	Manna Gum	Red Gum
Silver Wattle		

Grey Mistletoe (*Amyema quandang*)

Cootamundra Wattle	Early Black Wattle	Late Black Wattle
Lightwood	Silver Wattle	

Buloke Mistletoe (*Amyema linophylla*)

Buloke

Creeping Mistletoe (*Muellerana eucalyptoides*)

Red Gum

Ern Perkins

Eltham Copper Butterfly – Andrea Canzano 21/4/04

Andrea Canzano is currently studying The Eltham Copper Butterfly (*Paralucia pyrodiscus lucida*) in the Zoology Deptment at La Trobe University, Bundoora.

Eltham Copper Butterflies are small (wingspan of only 2.5cm) and have bright copper patches on the upper area of their wings. Their most defining feature is the presence of orange tips on the male antennae. Freshly emerged butterflies have a white edge to their wings and the females have more rounded wings than the males.

They require woodland habitat with an understorey containing Bursaria *Bursaria spinosa* plants and preferably also native grasses, mosses and leaf litter. There are isolated colonies in Eltham/Greensborough (5 separate known colonies), in Castlemaine (4) and at Kiata (3), near Horsham. They are threatened by habitat degradation and isolation of populations and are classified as Vulnerable.

The life cycle and survival of the butterfly is intricately linked to presence of Bursaria and ants of the genus Notoncus.

The females usually lay between 6-14 pinhead sized eggs on the leaves or stems of Bursaria plant from mid December onwards. The eggs hatch after about 10 to 14 days and the larvae makes its way to the ant nest at the base of the plant. The larvae are nocturnal, sheltering during the day in the nest and emerging usually one hour after sunset to forage for one or two hours on the Bursaria leaves, where they are constantly attended by the ants. The ants, in return for caring and protecting the larvae, feed on the sugary secretions and amino acids exuding from the 'newcomer organ' on the back of the feeding caterpillar. This is thought to help keep the lavae free from fungal and bacterial disease. The larvae undergo a dormant period from June onwards and are first seen feeding again in late August.

The caterpillars pupate mid to late November and emerge as butterflies from December 2 onwards. The males will patrol a single plant, waiting for females to emerge and are more commonly seen for this reason. The females usually mate and lay their eggs within four days of emerging and then disperse widely in an attempt to avoid harassment by males.

In order to count the butterflies Andrea catches them and puts them in an esky to "relax" them and then marks them with a small spot of coloured ink. How far they travel depends on habitat but is thought to be only about 25 m. They don't appear to move between colonies. Their lifespan varies, averaging from 10-20 days.

The host plants can be either Hairy Bursaria *Bursaria spinosa ssp lasiophylla* or Sweet Bursaria *Bursaria spinosa ssp spinosa* and these are often grazed heavily and covered in scaly bugs and sooty mould but this does not seem to deter the caterpillars.

Andreas hopes to add to the knowledge of this relationship between the Eltham Copper Butterfly, the Bursaria and the Notoncus colonies and find out more about their preferred habitat.

Geraldine Harris

Observations

Rainbow Bee-eaters. Bruce Donaldson sighted between 20-30 juvenile Rainbow Bee-eaters at the quince tree near the Gower School, probably forming a flock before flying north. Juvenile birds have no dark stripe under their chins and no distinctive long tail feathers.

Nigel Harland reported seeing 40 Rainbow Bee-eaters flying over Sutton Grange 2-3 weeks ago. They regularly nested in the area prior to the drought.

Perigrine Falcon shot. The body of a Perigrine Falcon, that had obviously been shot, was found on the outskirts of the Brisbane Ranges near the water storage dams by Ken and Marjorie Cross.

Tawny Frogmouth. A number of beautiful feathers, found at the base of a tree in Hagues Lane, Barkers Creek, were thought to belong to a Tawny Frogmouth. No carcass was found. Geraldine Harris

Swimming Kangaroo. While walking with the U3A group at Taradale, Rita Mills saw a kangaroo swimming in the channel. It was not known whether it had jumped or fallen into the channel but it was seen to jump straight up the bank and out of the water

King Parrot. During summer a King Parrot was seen in the Bullengarook area near Gisborne. Bruce Donaldson

Hands on experience of a White-throated Needletail. Robyn van Smeerdijk photographed a "still warm" White-throated Needletail she found at Bright. Robyn was surprised at its size and weight and spoke of the privilege of being able to see and handle such a bird. The body has since been passed on to Melbourne Museum staff.

Phascogale. Debbie Farmer reported finding what looked to be a previously healthy male phascogale, dead in the Metcalfe Flora and Fauna Reserve in the second week of March this year. He was lying in the middle of the track and had loose fur on either side of his rib cage, as if something had had it in its jaws.

Scarlet Robin. Chris Morris noticed a Scarlet Robin listening in at the recent meeting at the site where the pines had been removed in the Botanical Gardens.

White-browed Babblers. Wendy French was delighted to see five White-Browed Babblers moving about between the ground and the trees in her garden on the Newstead Road at Maldon.

Long-billed Corellas. The noisy large white birds responsible for devastating Athol Dorman's fruit trees and digging up his nature strip were probably either Long-billed Corellas or Sulphur-crested Cockatoos.

Lyrebirds galore. On a recent climbing trip in the Cathedral Ranges, Jarrod Harris was delighted to see up to ten lyrebirds during the weekend: on the path; crossing in front of the car; and on three occasions, calling and displaying.

April Birds. The Grey Shrike-thrush, a White-eared Honeyeater and a pair of Scarlet Robins have just returned (26/4). Shirley Parnaby

Spoonbills and Parsons Band Orchids. Natasha Harris sighted three Yellow-billed Spoonbills on a dam in Tomkies Road and noted Parsons Band Orchids are already in seed in the bush at Barkers Creek

Understanding Nature Calendar (Background)

At a meeting of Bush Practice Network Dick Southcombe raised the concept of such a calendar and received a favourable response. To facilitate this project the SEANA (South East Australian Naturalists' Association) committee proposed that Field Naturalists Clubs be asked to supply relevant topics and text. **Field Naturalists are challenged to suggest interactions or preferably write about half a page of information to explain an interaction between organisms in the natural environment.**

The relationship between Imperial White Butterfly, Box Mistletoe, and Mistletoe Bird prepared by Rod Orr, Bendigo FNC has been offered as an example.
The larvae of the Imperial White Butterfly (Delias harpalyce) hatch from eggs laid on the leaves of the Box Mistletoe (Amyema miquelii). They eat the mistletoe leaves and pupate on a communal web which they spin on what is left of the clump of mistletoe. The adult butterflies emerge on a hot day during late Spring or early Summer.

The Box Mistletoe is a commonly occurring native plant which grows as an aerial parasite, extracting liquids through its attachment to its host. Its usual host plants are several of the Box and Ironbark eucalypts of the forests of central Victoria. These trees grow in the clay soils derived from the erosion of Ordovician mudstones and sandstones and are well adapted to the climate of this part of the state.

This is an interesting example of a complex interaction between a beautiful butterfly and its food plant, between a parasitic mistletoe and its hosts, and between the Box-Ironbark eucalypts of central Victoria and their biophysical environment which provides all of the essentials for their survival.

The method of dispersal of the Box Mistletoe adds yet another dimension to this chain of relationships. It involves the Mistletoe Bird (Dicaeum hirundinaceum), a beautiful, tiny native bird which feeds on the mistletoe's fruit and spreads its seeds to other potential eucalypt hosts.

This chain of connections is delicately balanced - not every mistletoe plant is completely eaten by butterfly larvae, not every eucalypt is infested with Box Mistletoe, there seem to be enough mistletoes with fruit for the Mistletoe Birds to eat, and not every mistletoe seed germinates on a suitable host.

The host trees, their mistletoe parasites, the insect larvae which feed on their leaves, and the spread of mistletoes by Mistletoe Birds, are all relationships which have evolved over a very long time. These organisms are all very well adapted to each other.

Please give or send your ideas to Ern Perkins, P O Box 212, Castlemaine 3450 and he will forward them onto John Gregurke, Secretary, South East Australian Naturalists' Association

Blue-tongue Lizards

The Blue-tongue Lizard which has hibernated each winter for many years beneath the paved area under our clothes line, emerged in early September, and has survived very well despite the lack of snails. Of course the occasional treat of duck eggs from my neighbour's yard certainly helped! (The ravens did well on these also.)
I have found one tiny "Blue-tongue" settled in cosily under a strip of weed mat against the front fence – preparing for winter, no doubt.

Shirley Parnaby

"The Busy Tree"

At 9am on 20th April, the flowering gums at 6 Montgomery St. became a hive of avian activity for approximately fifteen minutes. The two trees, both heavily lerp infested, became a smorgasborg for the following honeyeaters: White-plumed, Brown-headed, White-naped, Yellow-faced, New Holland, Fuscous (with three juveniles) and a Red Wattlebird. Also in for their share were Silvereyes, Yellow-rumped Thornbill and Striated Pardalote.
Overhead there were Welcome Swallows and Dusky Woodswallows. Also in the vicinity were all the regulars, Magpies, Grey Thrush, Ravens, Sulphur-crested Cockatoos, Grey Currawongs, as well as two or three unmentionables!
To cap it all off the Eastern Spinebill was busy "working" the correas with a Spotted Pardalote "peep peeping" in the background.
What a wonderful way to start the day!

Ken and Maureen Dredge

From the Business Meeting 23/4/04

Cape Broom Area/ Botanical gardens. At an on-site meeting it was decided Peter Johnson, DSE, and Tim Read, Mt Alexander Shire, will oversee any further removal of pines to ensure a more sensitive approach. The movement of the Eltham Butterfly colony, from the roadside to better habitat further up the hill, indicates the need for a carefully considered revegetation programme in the area to ensure their preferred habitat is maintained. Such a programme will need to be carried out over a 2-3 year time frame to allow for suitable propagation of locally collected seed etc.

Club website. Our webmaster, Ern Perkins, will proceed with the initial setting up of a site at his convenience. More input on content will be sought at the May meeting. This is a progressive move by our club, which will provide additional opportunities for sharing naturalist information.

Newstead to Castlemaine sewerage pipeline. Castlemaine Field Naturalists have met with representatives from VicRoads, Mt. Alexander Shire Council and the contractors to address concerns about the manner in which excavation work is being carried out along the roadside reserves for the Newstead to Castlemaine sewerage pipeline. Blue tapes have been used to mark access places in an attempt to minimise the amount of damage done by any further works.

TSN Roadside Conservation Surveys project. Some weeding and planting is required but careful consideration is needed to determine what weeds can be successfully removed and where and what plants can be reintroduced for the best results. Concern has been expressed that earlier roadside surveys and roadside signs are being ignored and many local roads need to be resurveyed urgently in light of knowledge that has become available in recent years. Mt Alexander Shire was once a showpiece on roadside management. Perhaps in-service training for council employees and contractors working in these fragile environments would help achieve that status again.

Extra Events for your Calendar

Aug/Sept. 2004. Club Visit to Chiltern National Park in Spring.
Special rates would be available for the CFNC at the Chiltern motel. The standard special bird-watching price is two nights accommodation, with two continental breakfasts and one dinner at $110 per person twin share. If we stayed during the week, prices would be lower eg. 3 nights accommodation for approximately the price of two nights. If you are interested in a trip to Chiltern, please let me know, and indicate your preference for dates. If you are not attending the coming meeting, please ring me at 5472 3124. Possible options are:
2 nights (weekend): Fri 27-Sat 28 Aug.
3 nights: Sun 29-Tues 31 Aug
3 nights: Mon 30 Aug - Wed 1 Sept

Ern Perkins.

Spring 2004. The next **Australian Naturalists Network Get-together in Perth** is to be arranged by Darling Range Branch of Western Australian Naturalists' Club.
Pre-tour – Wednesday 22 Sept to Saturday 25 September
Core Programme – Sat 25 Sept to Mon 4 October being a fairly formal event
Post Tour – Tues 5 Oct to Fri 8 October
The venue for the core programme, including accommodation, is the Perth International Big 4 Tourist Park, Hale Road, Forestfield, 6058. You will need to make your own accommodation arrangements with the park. An early indication of proposed attendance numbers for the three events would greatly assist any planning arrangements.
Contacts: Eddie and Joy Dell, ANN Get-together Co-ordinators 2004.
Ph:08 9295 1215, e-mail: dellej@westnet.com.au

Articles Welcome - Articles, reports and observations can be left at Tonks Bros in Barkers St. or sent to Geraldine Harris, P.O.Box 184, Castlemaine, 3450, Ph. 54742244, gedharris @castlemaine.net
Articles need to be submitted by the 4th Thursday of the month.
Disclaimer - The opinions expressed in this newsletter are those of the contributors and not necessarily those of the Club.

Castlemaine Field Naturalists Programme - May, 2004.

General meetings are held in the Uniting Church (UCA) hall (enter from Lyttleton St.) at 8.00 pm on the second Friday of each month, except January.
Excursions are usually on the Saturday following the general meeting, and leave promptly at the times stated from The Octopus, opposite Castle Motel, Duke Street. Outdoor excursions are likely to be cancelled in extreme weather conditions. There are NO excursions on total fire ban days.
Business meetings are held at 27 Doveton Street on the 4th Thursday of each month, except December, at 7.30 pm. All members are invited to attend.
VISITORS ARE WELCOME AT CLUB MEETINGS AND EXCURSIONS.

Fri. May 14. ***Odonata, The Life of Dragonflies & Damselflies.*** Ian Endersby. Ian was awarded the Australian Natural History Medallion in 2002 particularly for his work in the fields of ornithology and entomology. UCA Hall, 8pm.
Sat. May 15. ***Heritage Walk:*** Short walk to horse paddock in ***Cobblers Gully from Eureka Reef*** car park. Return for billy tea and damper. Leaders: Ern Perkins & Doug McConville (FOMAD), Ph. 5470 6332. Meet at Market Building, 1.30pm sharp.
Sat. May. 14, 15. ***Threatened Bird Network Swift Parrot Survey.*** Details at the May Meeting or contact Rita Mills, Ph 5472 4335 (before 9am and after 4pm).
Friday Jun. 11. ***The Importance of Environmental Flows in Rivers, Streams and Wetlands.*** Dr.Paul Sinclair of Environment Victoria.
Sat. Jun. 12. ***Melville Caves.*** Leader: Chris Morris, Phone Ph.9885 4221. Leave from the Octopus at 10am sharp. Bring Lunch.
Fri. Jul. 9. ***Kimberleys.*** Chris Morris. UCA Hall, 8pm.
Sat. Jul. 10. ***Native Trees of Castlemaine.*** Leader: Ern Perkins, Ph 54723124. Leave the Octopus at 1.30 sharp.
Sat. Jul. 31, Sun. Aug. 1. ***National Swift Parrot and Regent Honeyeater Survey.***
Fri. Aug. 14. ***Concerning Forest Wildlife.*** Richard Loyn, Arthur Rylah Institute.
Sat. Aug. 15. ***Jackass Flat Reserve-Whitehills.***
Thu. Aug. 26. ***Broom Pull.*** Meet at the Mary St/Froomes Rd. corner at 9am. Wear sturdy footwear, gloves, hat etc. Bring drinks and morning tea.

2004 Committee - Chris Morris (President) Ph. 9885 4221, Rita Mills (Vice President and Public Officer) Ph. 54724553, George Broadway (Secretary) Ph. 5472 2513, Hans van Gemert (Treasurer) Ph. 5472 1082, Geraldine Harris (Newsletter Ed) Ph. 5474 2244, Ern Perkins Ph. 5472 3124, Richard Piesse, Athol Dorman and Nigel Harland.

Subscriptions for 2004
Ordinary membership: Single $22, Family $30
Pensioner or student: Single $19, Family $24
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Castlemaine Field Naturalists Club, PO Box324, Castlemaine. Incorporation #A0003010B